UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. ~~#43142~~-Q; Delnav; Miscellaneous Data
CASWELL#393; Accession#243130

FROM: William Dykstra, Toxicologist
Toxicology Branch, HED (TS-769)

TO: George LaRocca (15)
Registration Division (TS-767)

Recommendations:

1) Dioxathion was not considered carcinogenic to Osborne-Mendel rats or B6C3F1 mice in the study submitted.

Review:

1) Bioassay of Dioxathion for Possible Carcinogenicity (NCI Carcinogenesis Technical Report Series No. 125, 1978; CAS No. 78-34-2; NCI-CG-TR-125)

A bioassay for possible carcinogenicity of technical grade dioxathion was conducted using Osborne-Mendel rats and B6C3F1 mice. Dioxathion was administered in the feed, at either of two concentrations, to groups of 50 male and 50 female animals of each species. The high and low time-weighted average concentrations were, respectively, 180 and 90 ppm for male rats and 90 and 45 ppm for female rats. The high and low time-weighted average concentrations for male mice were 567 and 284 ppm, respectively, and for female mice were 935 and 467 ppm, respectively. After a 78-week period of chemical administration, observation of the rats continued for an additional 33 weeks and the mice were observed for an additional 12 to 13 weeks. For rats, 50 animals of each sex were placed on test as controls and fed only the basal diet, while for mice 20 animals of each sex served as controls.

Results:

In both species adequate number of animals survived long enough to be at risk from late-appearing tumors.

A variety of neoplasms was observed in treated animals of both species, however, none of the neoplasms observed were either histopathologically unusual or in statistically significant incidences.

Conclusion:

Under the conditions of this bioassay, dietary administration of dioxathion was not carcinogenic in Osborne-Mendel rats or B6C3F1 mice.

Classification: Core-Minimum Data

TS-769:th:TOX/HED:LCHITLIK:12-17-80